

Claims:

1. An adjustable keyboard support assembly, securable to a mounting surface comprising:

5 at least one arm having a first end and a second end and a top and bottom surface;
 a keyboard tray attached to the first end of each arm at a front attachment point;
 at least one rail engaged with the second end of each arm at a rear pivot point, wherein the rear pivot point is able to be translated in a generally linear direction along the
10 rail;
 a first arm axis extending between the front attachment point and rear pivot point;
 a positioning surface disposed along the bottom surface of the second end of each arm;
15 at least one positioning mechanism fixed in relation to the mounting surface and disposed so as to engage each positioning surface;
 an arm positioning dimension defined in a generally vertical direction between the arm axis and the positioning mechanism; and
 wherein the arm positioning dimension increases from the portion of the
20 positioning surface most distal from the rear pivot point to the portion of the positioning surface most proximate to the rear pivot point.

2. The assembly of claim 1 and further comprising:

25 two arms substantially mirrored in construction pivotally attached to opposite sides of the keyboard tray; and
 two rails substantially mirrored in construction, wherein each rail is slideably engaged with the second end of one of the side arms.

3. The assembly of claim 2 and further comprising:

30 a support member having opposite first and second ends wherein the first and second end is attached to the second arm;

wherein the front attachment point of the first arm and the front attachment point of the second arm allow pivoting of the keyboard tray with respect to the first arm and the second arm at the point where each arm and the keyboard tray are in supportive engagement.

5

4. The assembly of claim 3, wherein the keyboard tray further comprises:
a locking device adapted to be engaged to inhibit rotation of the keyboard tray relative to the first arm and second arm and to be disengaged to allow relatively free rotation of the keyboard tray relative to the first arm and second arm.

10

5. The assembly of claim 4, wherein the locking device comprises:
a handle extending from a bottom side of the keyboard tray, wherein rotation of the keyboard platform relative to the first arm and second arm and rotation of the handle in a second direction loosens the locking device to allow relatively free rotation of the keyboard tray relative to the first arm and the second arm.

15

6. The adjustable keyboard support assembly of claim 5, wherein the locking device further comprises a top clamp plate on one side of the support member, a bottom clamp plate on the opposite side of the support member, a screw, and a nut, wherein the screw and nut moveably attach the handle to the top and bottom clamp plates.

20

7. The assembly of claim 1 and further comprising:
at least one notch disposed in the positioning surface.

25

8. The assembly of claim 7 and further comprising:
four notches disposed in the positioning surface, wherein the notches are substantially equally spaced.

30

9. The assembly of claim 1 wherein the positioning surface is shaped such that translating the second portion of the side arm a horizontal distance within the rail, results in translation of the keyboard tray a vertical distance, wherein the relationship between the translated horizontal distance and the resulting vertical distance is linear.

10. The assembly of claim 9 and further comprising:
a plurality of notches disposed in the positioning surface at substantially equally spaced distances.

5

11. The assembly of claim 9 and further comprising:
four notches disposed in the positioning surface, wherein the notches are substantially equally spaced.

10 12. The assembly of claim 1, wherein the arm positioning dimension of the arm increases in a substantially linear relationship from the portion of the surface, most distal from the rear pivot point to the portion of the positioning surface most proximate to the rear pivot point.

15 13. The assembly of claim 12 and further comprising:
A plurality of notches disposed in the positioning surface at decreasing intervals .

14. The assembly of claim 13 wherein the notches are spaced from each other such that translating the second portion of the side arm a horizontal distance between each
20 notch results in a translation of the keyboard tray vertical distance, and the relationship between the horizontal distance and the resulting vertical distance is linear.

15. The assembly of claim 1 and further comprising:
at least one mating mechanism for releasably preventing relative movement
25 between the positioning surface and the positioning mechanism.

16. The assembly of claim 3, wherein each notch is shaped for positive engagement with the positioning mechanism.

30 17. The assembly of claim 16, wherein each positioning mechanism is L-shaped.

18. An adjustable keyboard support assembly, securable to a mounting surface comprising:

two arms, substantially mirrored in construction, each arm having a first end and a second end and a top and bottom surface;

5 a keyboard tray attached on opposite sides to the first end of each arm at a front attachment point;

two rails substantially mirrored in construction, each rail engaged with the second end of one arm at a rear pivot point, wherein the rear pivot point is able to be translated in a generally linear direction along the rail;

10 a first arm axis extending between the first and rear pivot point;

a positioning surface disposed along the bottom surface of the second end of each arm;

at least one notch disposed in the positioning surface;

15 at least one L-shaped positioning mechanism fixed in relation to the mounting surface and disposed so as to engage each positioning surface;

an arm positioning dimension defined between the arm axis and the positioning mechanism;

20 wherein the arm positioning dimension increases from the portion positioning in surface most distal from the rear pivot point to the portion of the positioning surface most proximate to the rear pivot point.

wherein the positioning surface is shaped such that translating the second portion of the side arm a variable horizontal distance within the rail, results in translation of the first portion of the side arm a vertical distance and the relationship between the horizontal distance and the resulting vertical distance is linear.

25 19. The assembly of claim 18 and further comprising:

four notches disposed in the positioning surface, wherein the notches are substantially equally spaced.

30 20. An adjustable keyboard support assembly, securable to a mounting surface comprising:

at least one arm having a first end and a second end and a top and bottom surface;

a keyboard tray attached to the first end of each arm at a front attachment point;

at least one rail engaged with the second end of each arm at a rear pivot point,

5 wherein the rear pivot point is able to be translated in a generally linear direction along the rail;

a first arm axis extending between the front attachment point and rear pivot point; and

means for positioning the keyboard tray such that translating the keyboard tray
10 horizontally from a stored position to a use position causes the keyboard tray to automatically be translated upwardly.